10

15

20

25

30

BIBLIOGRAPHY

- (Aho86) A. V. Aho, R. Sethi, and J. D. Ullman. Compilers, Principles, Techniques, and Tools. Addison-Wesley Publishing Company, Reading, MA, 1986.
- (Ambler92) A. Ambler, M. Burnett, and B. Zimmerman. Operational versus definitional: a perspective on programming paradigms. Computer, 25(9):28-43, September 1992.
- (Azem93) A. Azem, F. Belli, O. Jack, and P. Jedrzejowicz. Testing and reliability of logic programs. In The Fourth International Symposium on Software Reliability Engineering, pages 318-327, 1993.
- (Belli95) F. Belli and O. Jack. A test coverage notion for logic programming. In The 6th International Symposium on Software Reliability Engineering, pages 133-142, 1995.
- (Brown87) P. Brown and J. Gould. Experimental study of people creating spreadsheets. ACM Transactions on Office Information Systems, 5(3):258-272, July 1987.
- (Burnett98a) M. Burnett, J. Atwood, and Z. Welch. Implementing level 4 liveness in declarative visual programming languages. In 1998 IEEE Symposium on Visual Languages, September 1998.
- (Burnett98b) M. Burnett and H. Gottfried. Graphical definitions: Expanding spreadsheet languages through direct manipulation and gestures. ACM Transactions on Computer-Human Interaction, 5(1):1-33, March 1998.
- (Burnett94) M. Burnett, R. Hossli, T. Pulliam, B. VanVoorst, and X. Yang. Toward visual programming languages for steering in scientific visualization: a taxonomy. IEEE Comp. Science and Engineering, 1(4), 1994.
 - (Chi97) E. H. Chi, P. Barry, J. Riedl, and J. Konstan. A Spreadsheet Approach to Information Visualization. In IEEE Symposium on Information Visualization, October 1997.
- (Christ75) R. Christ. Review and analysis of color coding research for visual displays. Human Factors, 17(6):542-570, 1975.
- (Clarke76) L. Clarke. A system to generate test data and symbolically execute programs. IEEE Transactions on Software Engineering, 2(3), September 1976.
- (Clarke89) L Clarke, A. Podgurski, D. Richardson, and S. Zeil. A formal evaluation of data flow path selection criteria. IEEE Transactions on Software Engineering, SE-15(11):1318-1332, November 1989.

25

5

- (Cook99) C. Cook, K. Rothermel, M. Burnett, T. Adams, G. Rothermel, A. Sheretov, F. Cort, J. Reichwein. Does immediate visual feedback about testing aid debugging in spreadsheet language? TR 99-60-07, Oregon State University, March 1999.
- (Duesterwald92) E. Duesterwald, R. Gupta, and M. L. Soffa. Rigorous data flow testing through output influences. In Proceedings of the 2nd Irvine Software Symposium, March 1992.
- (Frankl93) P. Frankl and S. Weiss. An experimental comparison of the effectiveness of branch testing and data flow testing. IEEE Transactions on Software Engineering, 19(8):774-787, August 1993.
- 10 (Frankl88) P. Frankl and E. Weyuker. An applicable family of data flow criteria. IEEE Transactions on Software Engineering, 14(10):1483-1498, October 1988.
 - (Green96) T. Green and M. Petre. Usability analysis of visual programming environments: A 'cognitive dimensions' framework. Journal of Visual Languages and Computing, 7(2):131-174, June 1996.
- 15 (Gupta93) R. Gupta, M. J. Harrold, and M. L. Soffa. Program slicing-based regression testing techniques. Journal of Software Testing, Verification, and Reliability, 6(2):83-112, June 1996.
 - (Harrold88) M. J. Harrold and M. L. Soffa. An incremental approach to unit testing during maintenance. In Proceedings of the Conference on Software Maintenance, pages 362-367, October 1988.
 - (Hudson91) S. Hudson. Incremental attribute evaluation: a flexible algorithm for lazy update.

 ACM Transactions Programming Languages and Systems, 13(3), July 1991.
 - (Hutchins94) M. Hutchins, H. Foster, T. Goradia, and T. Ostrand. Experiments on the effectiveness of dataflow- and controlflow-based test adequacy criteria. In 16th International Conference on Software Engineering, pages 191-200, May 1994.
 - (Kuhn97) W. Kuhn and A. U. Frank. The use of functional programming in the specification and testing process. In International Conference and Workshop on Interoperating Geographic Information Systems, December 1997.
- (Laski83) J. Laski and B. Korel. A data flow oriented program testing strategy. IEEE

 Transactions on Software Engineering, 9(3):347-354, May 1993.

30

5

- (Leopold97) J. Leopold and A. Ambler. Keyboardless visual programming using voice, handwriting, and gesture. In 1997 IEEE Symposium on Visual Languages, pages 28-35, September 1997.
- (Luo92) G. Luo, G. Bochmann, B. Sarikaya, and M. Boyer. Control-flow based testing of Prolog programs. In The 3rd International Symposium on Software Reliability Engineering, pages 104-113, 1992.
- (Marlowe90) T. Marlowe and B. Ryder. An efficient hybrid algorithm for incremental data flow analysis. In ACM Principles of Programming Languages, pages 184-196, January 1990.
- 10 (Murch84) G. Murch. Physiological principles for the effective use of color. IEEE Computer Graphics and Applications, pages 49-54, November 1984.
 - (Myers91) B. Myers. Graphical techniques in a spreadsheet for specifying user interfaces. In ACM Conference on Human Factors in Computing Systems, pages 243-249, April 1991.
- 15 (Ntafos84) S. C. Ntafos. On required element testing. IEEE Transactions on Software Engineering, 10(6), November 1984.
 - (Offutt96) J. Offutt, J. Pan, K. Tewary, and T. Zhang. An experimental evaluation of data flow and mutation testing. Software Practice and Experience, 26(2):165-176, February 1996.
- 20 (Ouabd95) F. Ouabdesselam and I. Parissis. Testing techniques for data-flow synchronous programs. In AADEBUG'95: Second International Workshop on Automated and Algorithmic Debugging, May 1995.
 - (Panko96) R. Panko and R. Halverson. Spreadsheets on trial: A survey of research on spreadsheet risks. In Twenty-Ninth Hawaii International Conference on System Sciences, January 1996.
 - (Perry90) D. Perry and G. Kaiser. Adequate testing and object-oriented programming. Journal of Object-Oriented Programming, 2, January 1990.
 - (Pollock89) L. Pollock and M. L. Soffa. An incremental version of iterative data flow analysis. IEEE Transactions on Software Engineering, 15(12):1537-1549, December 1989.

10

15

25

- (Rapps85) S. Rapps and E. J. Weyuker. Selecting software test data using data flow information. IEEE Transactions on Software Engineering, 11(4):367-375, April 1985.
- (Rothermel94) G. Rothermel and M. J. Harrold. Selecting tests and identifying test coverage requirements for modified software. In Proceedings of the 1994 International Symposium Software Testing and Analysis, pages 169-184, August 1994.
- (Rothermel97a) G. Rothermel and M.J. Harrold. A safe, efficient regression test selection technique. ACM Transactions on Software Engineering and Methodology, 6(2):173-210, April 1997.
- (Rothermel97b) G. Rothermel, L. Li, and M. Burnett. Testing strategies for form-based visual programs. In The Eighth International Symposium on Software Reliability Engineering, pages 96-107, November 1997.
- (Shneiderman98) B. Shneiderman. Designing the User Interface. Addison-Wesley, Reading, MA, 3rd edition, 1998.
- (Smedley96) T. Smedley, P. Cox, and S. Byrne. Expanding the utility of spreadsheets through the integration of visual programming and user interface objects. In Advanced Visual Interfaces '96, May 1996.
- (Viehstaedt92) G. Viehstaedt and A. Ambler. Visual representation and manipulation of matrices. Journal of Visual Languages and Computing, 3(3):273-298, September 1992.
- 20 (Weyuker86) E. J. Weyuker. Axiomatizing software test data adequacy. IEEE Transactions on Software Engineering, 12(12):1128-1138, December 1986.
 - (Weyuker93) E. J. Weyuker. More experience with dataflow testing. IEEE Transactions on Software Engineering, 19(9), September 1993.
 - (Wilcox97) E. Wilcox, J. Atwood, M. Burnett, J. Cadiz, and C. Cook. Does continuous visual feedback aid debugging in direct-manipulation programming systems? In ACM Conference on Human Factors in Computing Systems, pages 22-27, March 1997.
 - (Wong95) W. Wong, R. Horgan, S. London, and A. Mathur. Effect of test set minimization on fault detection effectiveness. In 17th International Conference on Software Engineering, pages 41-50, April 1995.

(Yang97) S. Yang, M. Burnett, E. DeKoven, and M. Zloof. Representation design benchmarks: A design-time aid for VPL navigable static representations. Journal of Visual Languages and Computing, 8(5/6):563-599, Oct/Dec 1997.